Taking the wheel:
how to change prescribing practices in your hospital

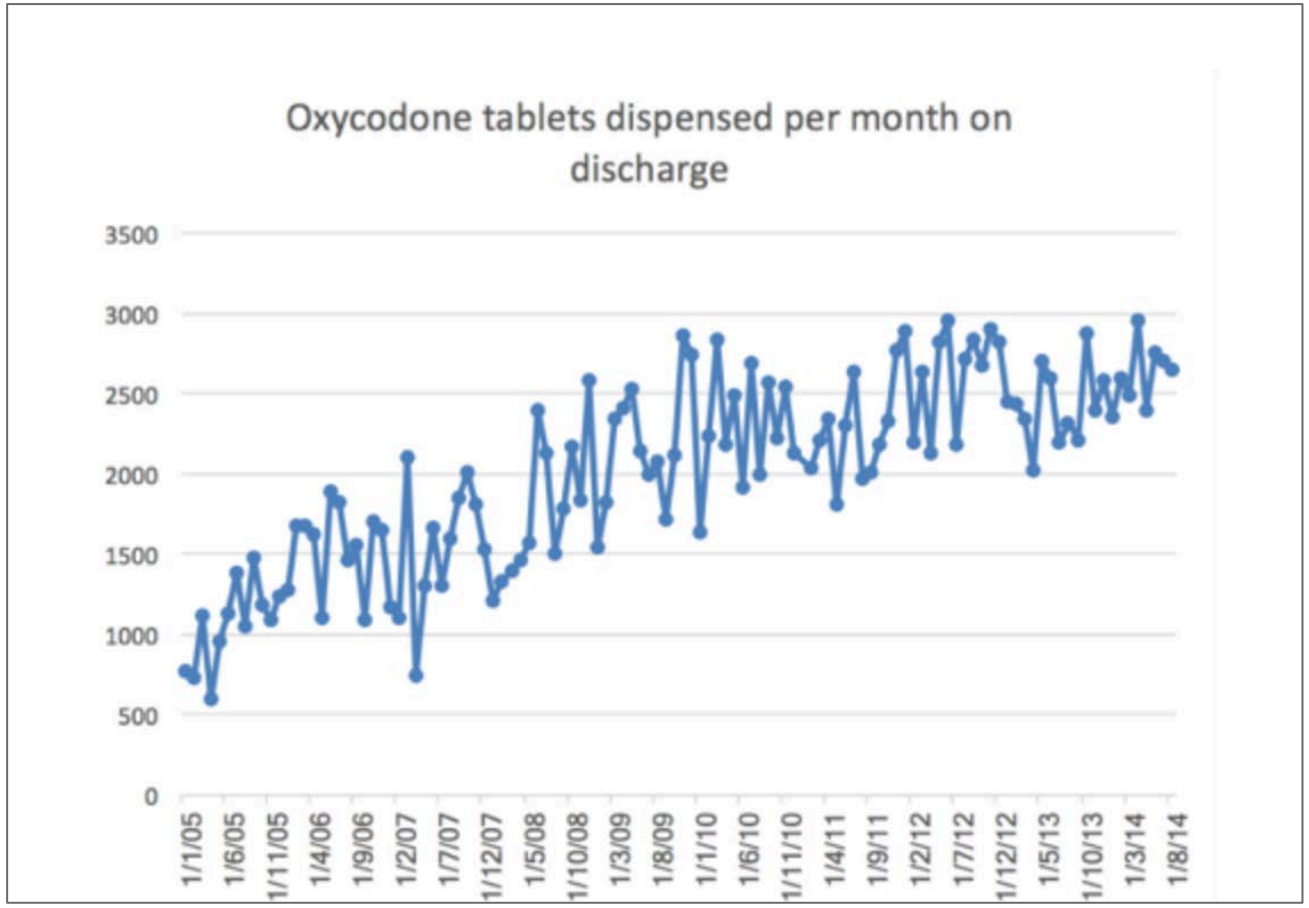
Dr Jennifer Stevens | St Vincent's Hospital

BETTER CARE EVERYWHERE

How did I end up in front of this camera when I am not a public speaker?

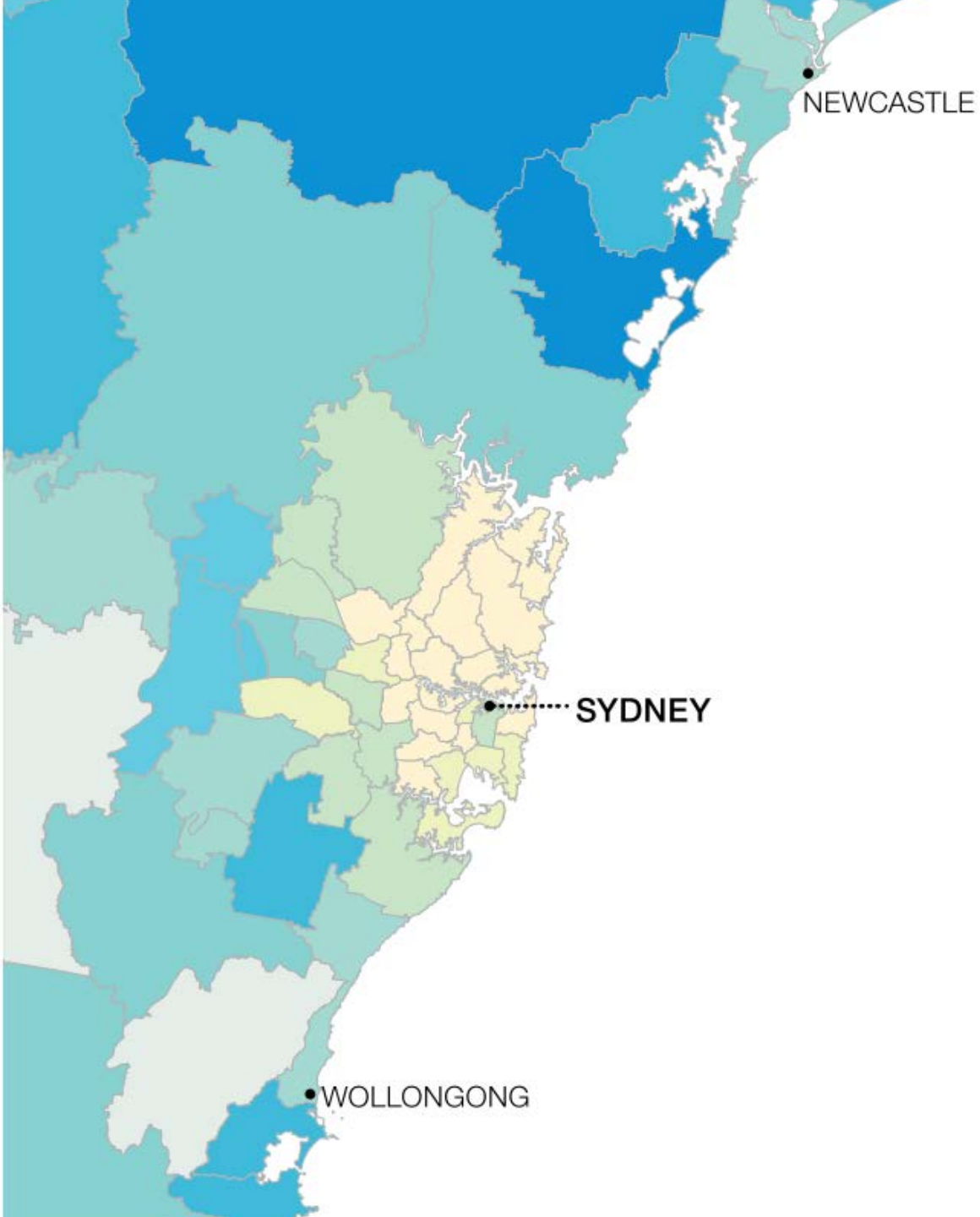
BETTER CARE
EVERYWHERE

HOW DID I END UP HERE?



My pharmacy colleagues staged an intervention

St Vincent's endone prescribing for discharge 2005 – 2014.



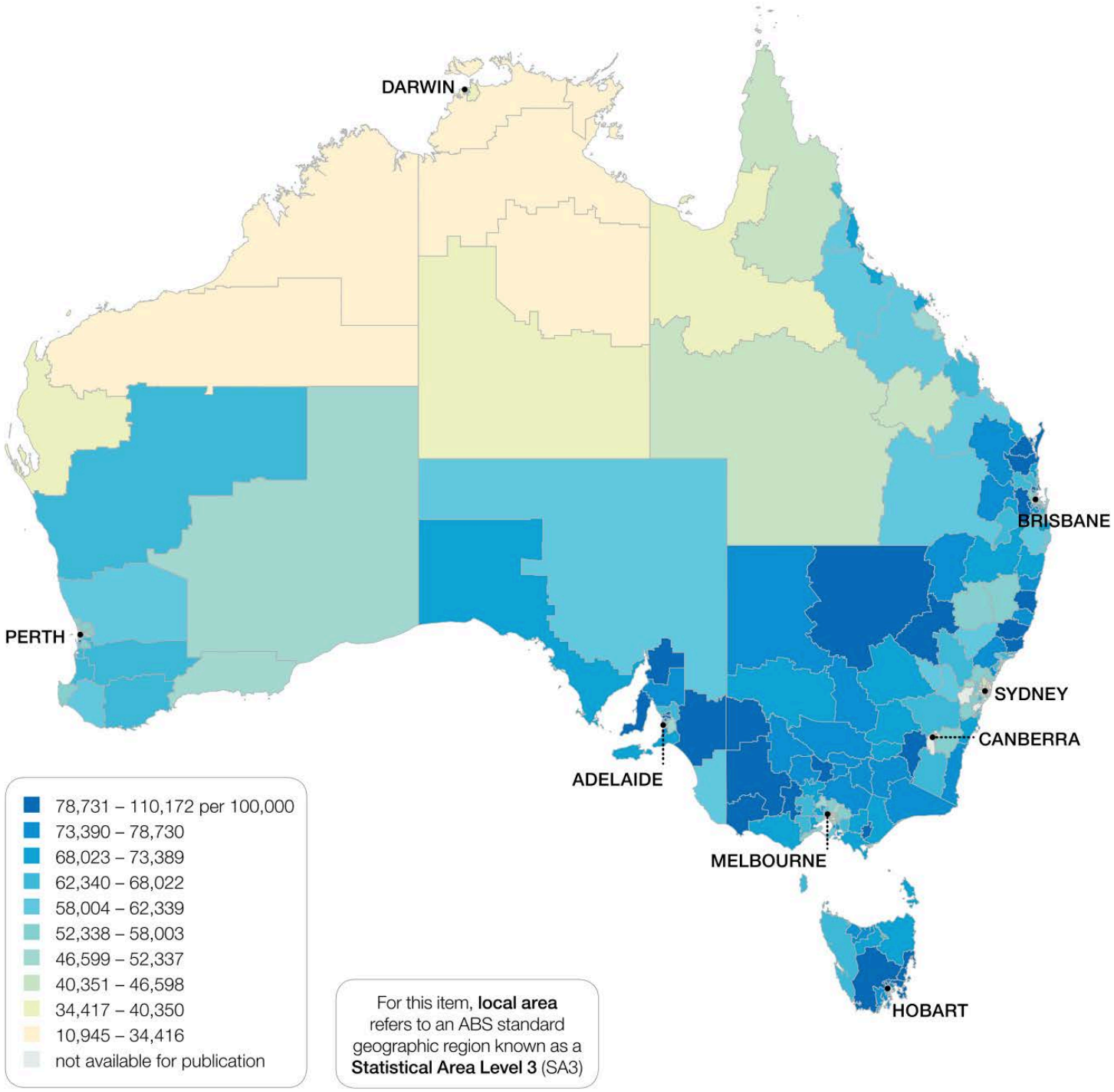
HOW DID I END UP HERE?

What is happening beyond my little bubble?

The number of PBS prescriptions dispensed for opioid medicines across 325 local areas (SA3s) ranged from 10,945 to 110,172 per 100,000 people. The number of prescriptions was **10.1x higher** in the area with the highest rate compared to the area with the lowest rate.

The broader picture

Opioid medicines dispensing
Fig 104. Number of PBS prescriptions dispensed for opioid medicines per 100,000 people, age standardised, by local area, 2013-14.



Others have done the audits for you. Sometimes the promises of big data come true!

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DATA

What data is available to you?

You should be able to concentrate on auditing patient outcomes and leave the pill counting to centralised systems.

DATA

YOUR GEOGRAPHIC AREA

DRUGS ON THE RISE IN YOUR AREA

YOUR LOCAL HOSPITAL

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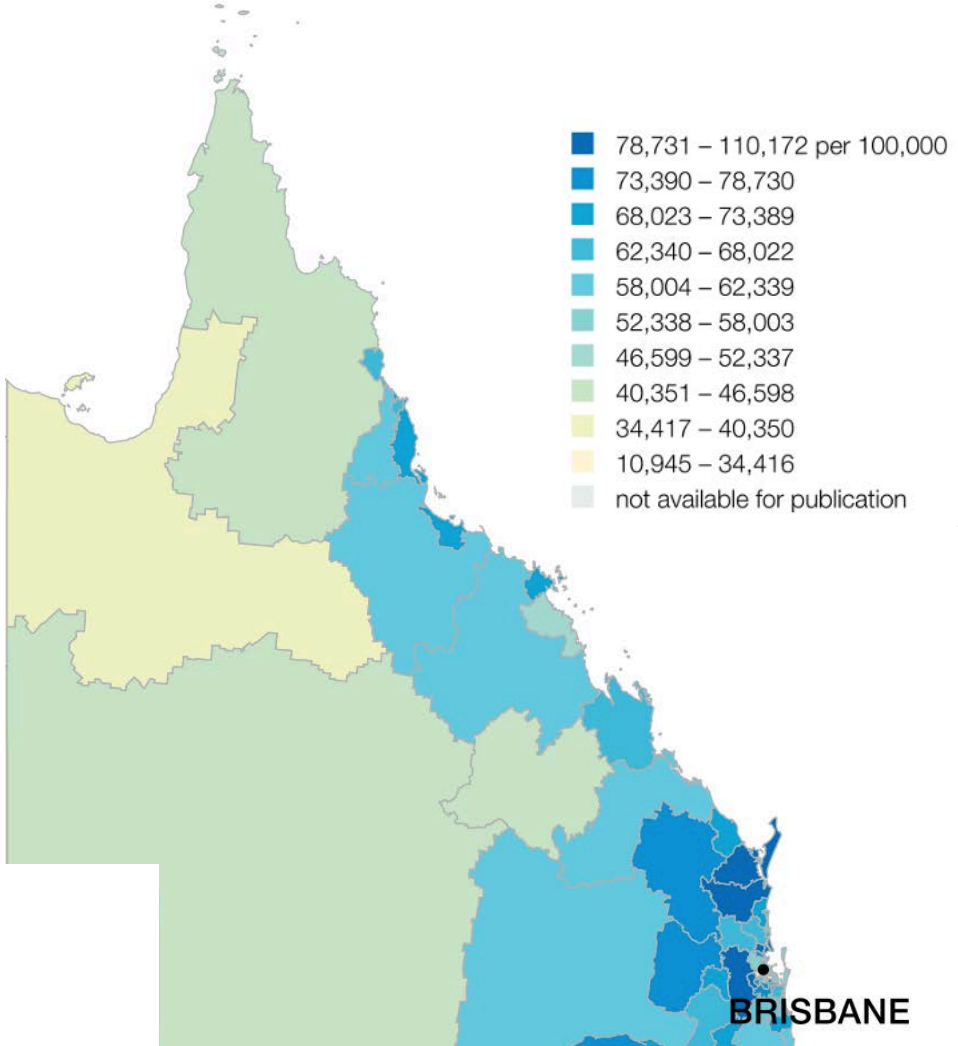
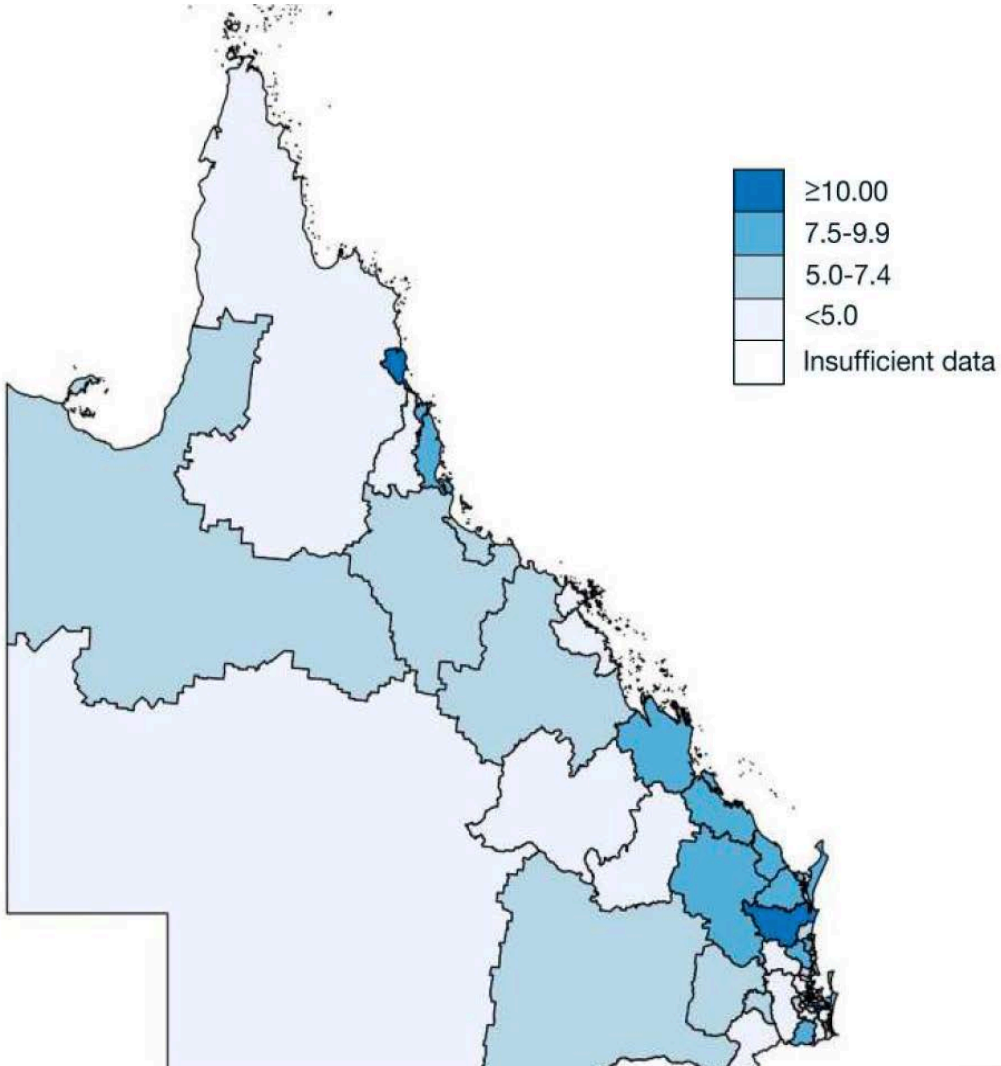
Australian Atlas (dispensing)

Number of PBS prescriptions dispensed for opioid medicines
Rate per 100,000 people



Pennington Institute (deaths)

Unintentional drug-induced deaths.
Rate per 100,000 population



DATA

Unintentional drug-induced deaths

Pennington Institute Annual Report

	2004-2008 rate	2009-2013 rate	2014-2018 rate
PHN301 Brisbane North			
Unintentional Drug-induced Deaths	4.0	5.9	5.7
Total Drug-induced Deaths	5.8	8.1	8.0
PHN303 Gold Coast			
Unintentional Drug-induced Deaths	4.2	5.8	7.5
Total Drug-induced Deaths	7.0	7.9	11.0
PHN101 Central and Eastern Sydney			
Unintentional Drug-induced Deaths	6.8	6.6	7.8
Total Drug-induced Deaths	8.8	8.5	9.5

DATA

- YOUR GEOGRAPHIC AREA
- **DRUGS ON THE RISE IN YOUR AREA**
- YOUR LOCAL HOSPITAL

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DATA

Type of drug

Ratio of 2004-8 c/ 2014-18.

Pennington Institute Annual Report

	Ratio
Heroin	
NSW	2.9
VIC	1.8
QLD	3.0
Pharmaceutical Opioids	
NSW	2.6
VIC	1.6
QLD	4.2
Stimulants	
NSW	3.9
VIC	4.3
QLD	7.7

DATA

- YOUR GEOGRAPHIC AREA
- DRUGS ON THE RISE IN YOUR AREA
- **YOUR LOCAL HOSPITAL**

Real-time display of numbers and trends by:

- ✓ Drug
- ✓ Dosage
- ✓ Formulation
- ✓ Team
- ✓ Ward

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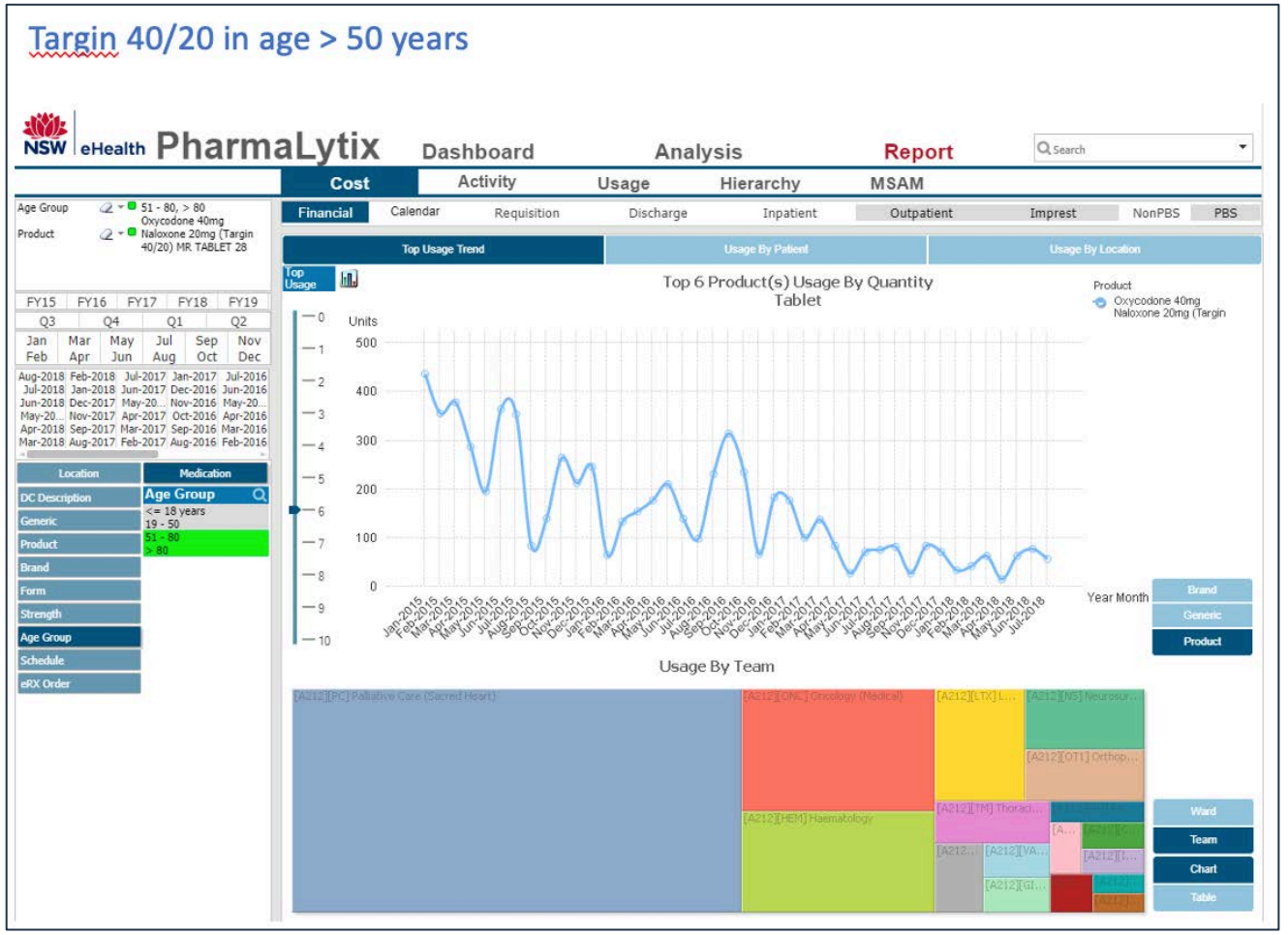
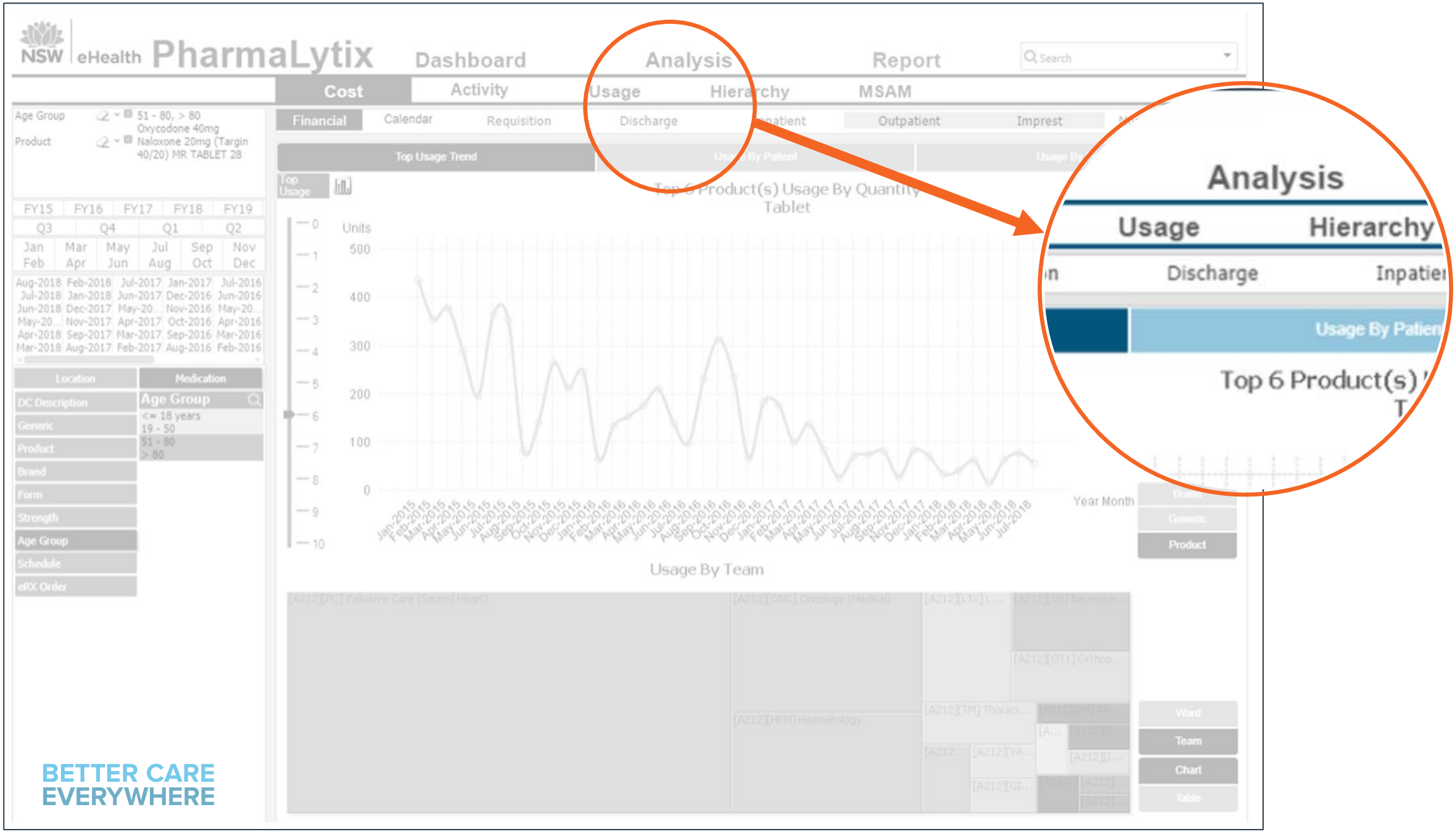
DATA

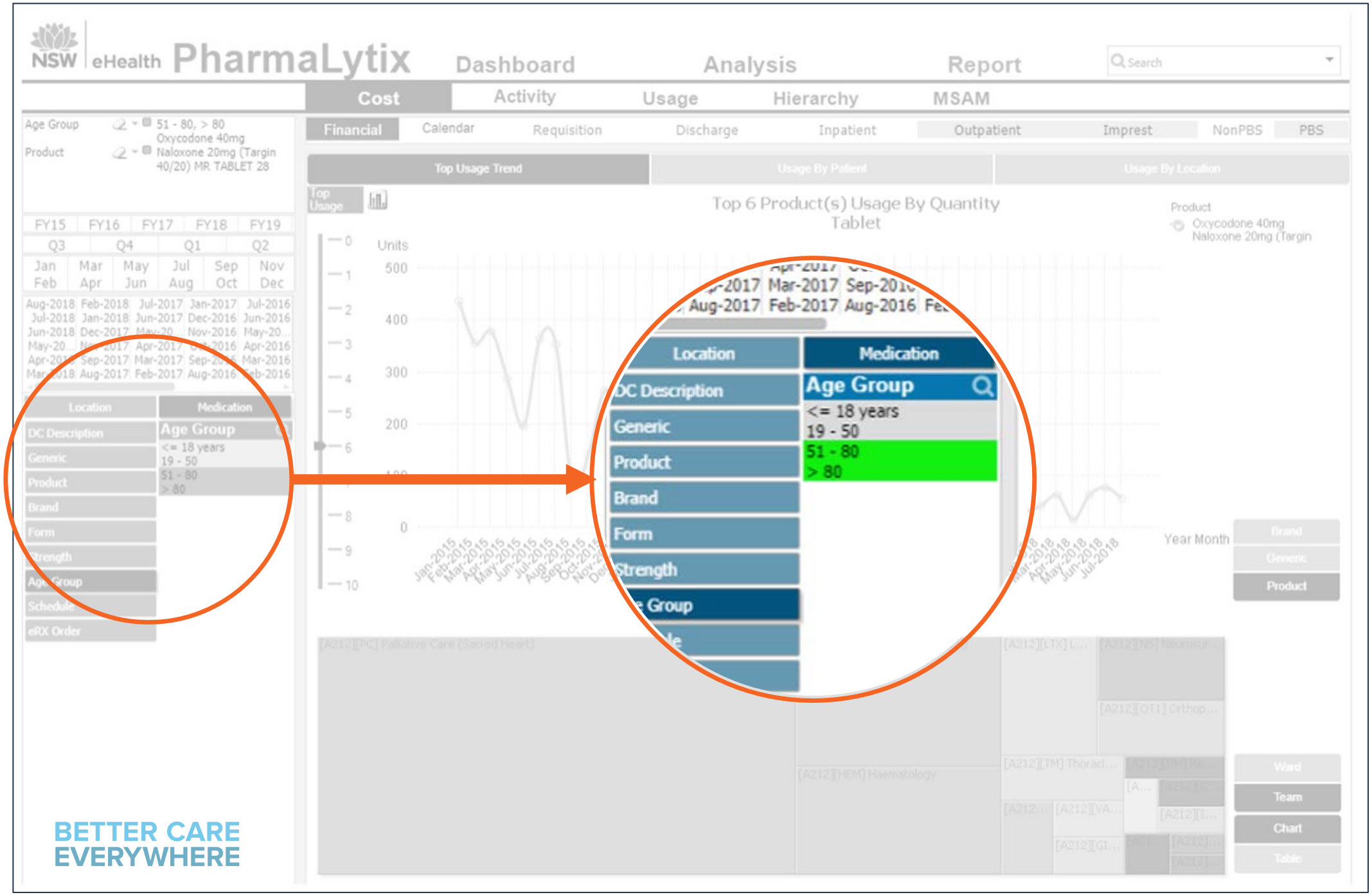
Real-time pharmacy data

This is the dashboard available for each hospital in NSW.



BETTER CARE EVERYWHERE


NSW eHealth PharmaLytix
Dashboard
Analysis
Report
Search
Cost
Activity
Usage
Hierarchy
MSAM
Age Group
51 - 80, > 80
Product
Oxycodone 40mg Naloxone 20mg (Targin 40/20) MR TABLET 28
Financial
Calendar
Requisition
Discharge
Outpatient
Imprest
Top Usage Trend
Top 6 Product(s) Usage By Quantity Tablet
Units
500
400
300
200
100
0
Year Month
Location
Medication
DC Description
Generic
Product
Brand
Form
Strength
Age Group
Schedule
eRX Order
<= 18 years
19 - 50
51 - 80
> 80
Usage By Team
Ward
Team
Chart
Table
BETTER CARE EVERYWHERE
Analysis
Usage
Hierarchy
Discharge
Usage By Patien
Top 6 Product(s)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FY16
FY17
FY18
FY19
Q3
Q4
Q1
Q2
Jan Feb
Mar Apr
May Jun
Jul Aug
Sep Oct
Nov Dec
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DC Description
Age Group
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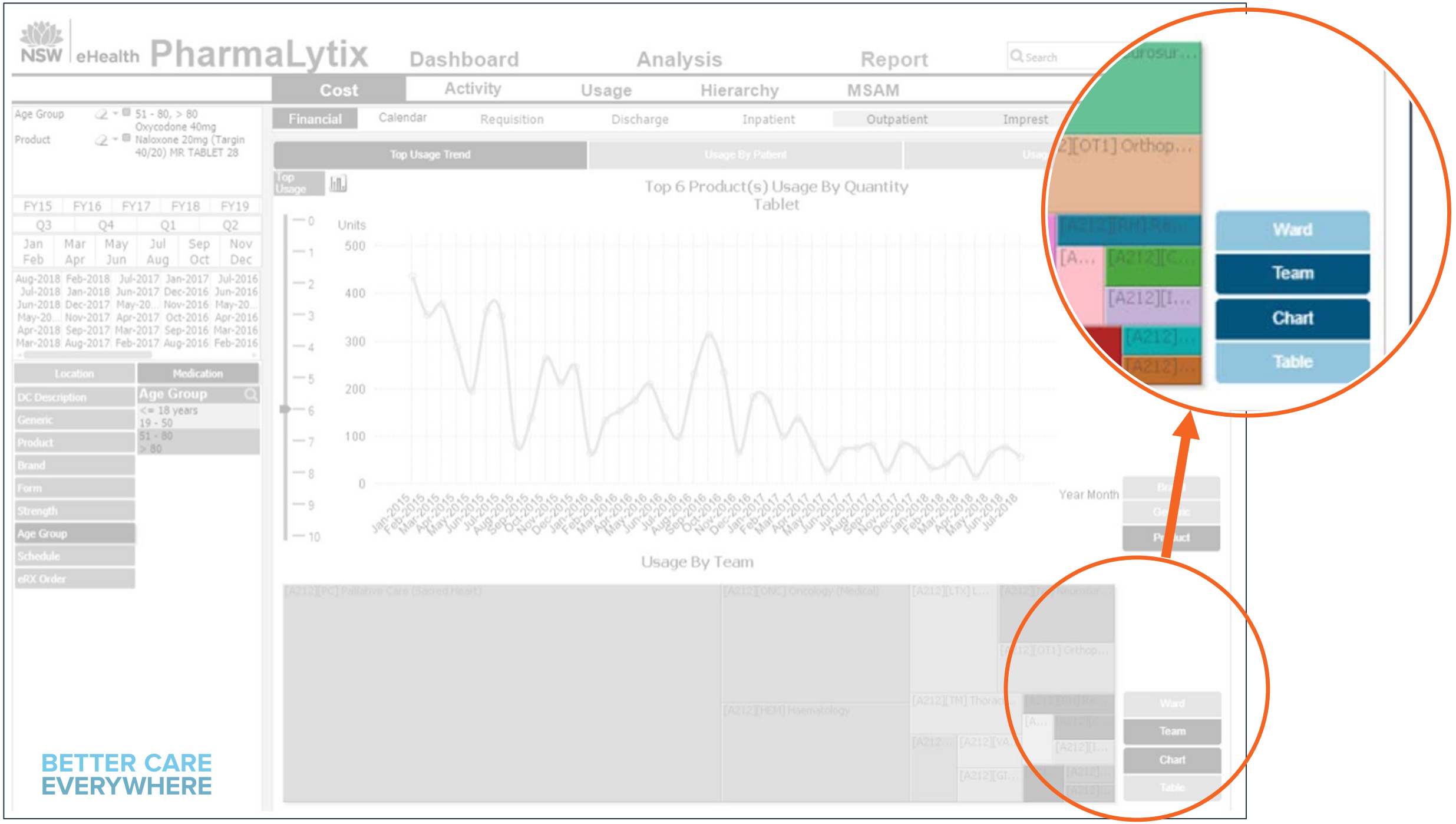
EVERYWHERE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One individual can make a big difference. Take the challenge and take the wheel!

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TAKE THE WHEEL

> One important lesson of the first narcotic epidemic is that physicians were educable. Indeed, by 1919, narcotic overprescribing was the hallmark of older, less-competent physicians. The younger, better-trained practitioners who replaced them were ***more circumspect about administering and prescribing opioids.***

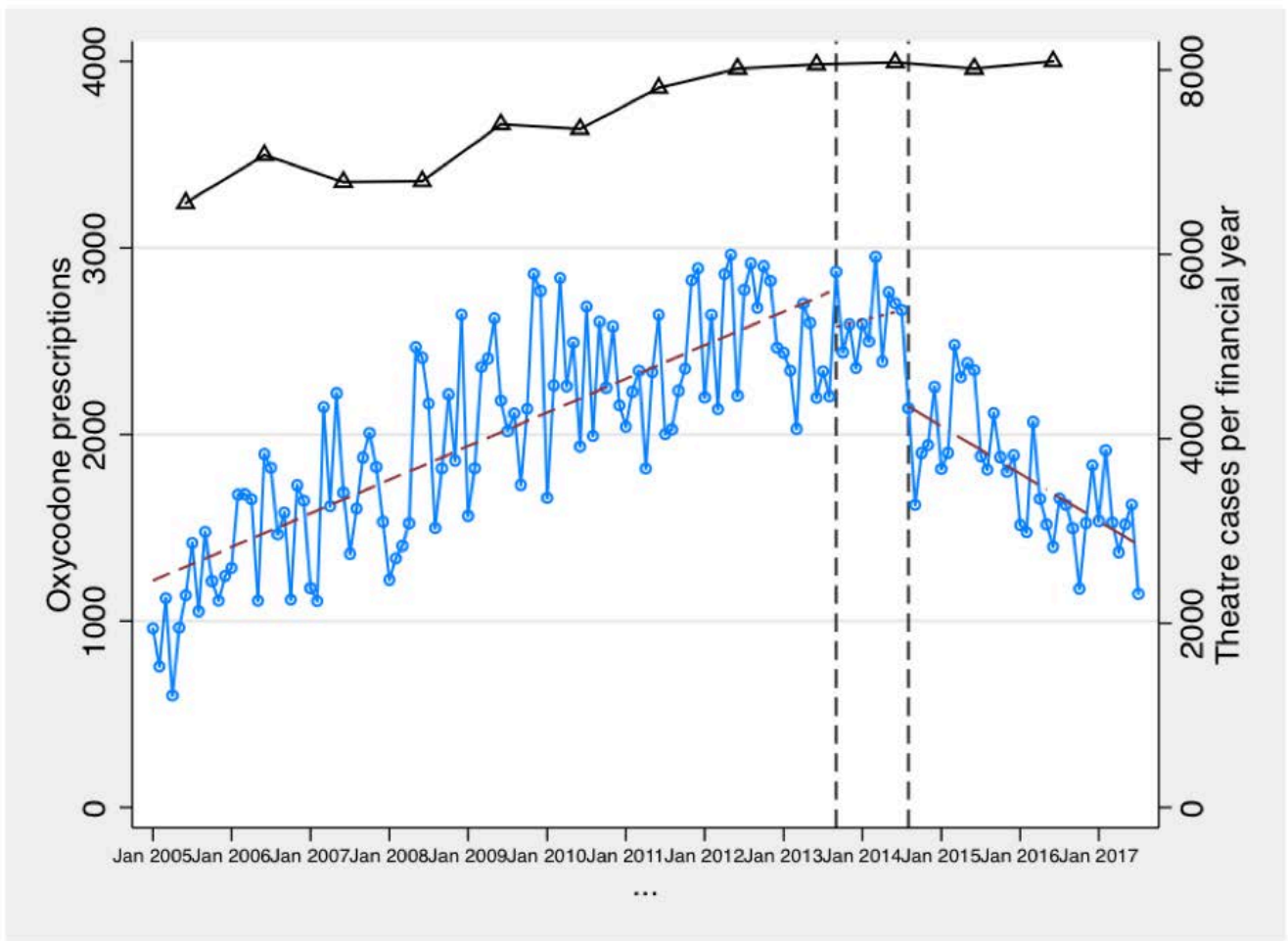
Blair T. 1919.
Is opium the "sheet-anchor of treatment"?
Am. J. Clin. Med.

TAKE THE WHEEL

Five years ago, just driving down the number of tablets going out the door seemed a reasonable aim.

TAKE THE WHEEL

Figure 1. Oxycodone tablets numbers prescribed on discharge per month



Stevens J, Trimboli A, Samios P. et al. Anaesthesia. 9 Jan 2019

TAKE THE WHEEL

Now we aim to improve opioid prescribing through a focus on the outcomes that matter to patients.

Where should I start? What are the easiest parts to tackle?

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GETTING STARTED

Maximising multimodal techniques

- NSAIDs. Be very specific about their use on discharge.
- NSAIDs are not contraindicated in the well elderly. Pain from a fracture may be more responsive to NSAIDs than opioids.
- Local anaesthetic techniques, especially the catheter techniques. Our hospitals should be using them as a routine for patients having laparotomies, TKR’s, selected fractured ribs, with robust policies around them.

GETTING STARTED

Slow-release opioids

Mounting evidence highlights the inappropriate use of slow-release opioids for the treatment of acute pain. The recommendations in this statement are in line with the approved indications for slow-release opioids listed by regulatory authorities including the Therapeutic Goods Administration in Australia, Medsafe in New Zealand, and the US Food and Drug Administration.

GETTING STARTED

increased respiratory depression

Increased respiratory depression – starting SR opioids with IR is like running an IV infusion as a background with PCA. We know this increases risk.

GETTING STARTED

4.8x

more likely to overdose

The highest risk group for post-surgical overdose risk in 64,000 veterans was for those combining short- and long-acting opioids.

Overdose Risk Associated with Opioid Use upon Hospital Discharge in Veterans Health Administration Surgical Patients. Pain Med. 2018

GETTING STARTED

increased risk of long-term opioid use

Prescription of slow-release opioids in the initial treatment of pain is associated with an increased risk of long-term opioid use.

GETTING STARTED

I think the use of post-operative SR opioids in the opioid naïve has added little or nothing and caused huge problems for some patients.

Introduction of

STATEMENT ON SR OPIOIDS

- ✓ Large reduction in use of post-operative SR opioids
- ✓ Large reduction in SR opioids prescribed at discharge

- ✓ Reduction in OME day 0-3
- ✓ Reduction in OME at discharge
- ✓ Reduction in days of pills at discharge

THINGS THAT MATTER TO PATIENTS

- ✓ Reduction in day 0-3 median pain score at rest and movement

- ✓ Decrease opioid-related adverse events (1.5)
- ✓ Decreased LOS
- ✓ Decreased 28-day re-admission rate

Tan A, Bugeja B, Begley D, Khor K, Stevens J, Penm J. Post-operative use of slow-release opioids: The impact of the ANZCA/FPM position statement on clinical practice. Anaesth Int Care. 2020;Nov 17.

GETTING STARTED

10.1%

still taking opioids

Prevalence and predictors of persistent post-surgical opioid use. Data 2015-16.

10.1% of opioid-naïve patients are still taking opioids ≥90 days post-surgery.

Stark N, Kerr S, Stevens J. Anaes Int Care 2017:45(6)
St Vincent's Private Hospital; Curran Foundation Grant

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GETTING STARTED

Secondary outcomes

Anxiety
OR 2.1

Spinal surgery
OR 4.0

- *28.5%*

Orthopaedic surgery
OR 4.6

- *15.1%*

Pain

GETTING STARTED

Secondary outcomes with 2020 audit

Spinal surgery	• *7%*
Orthopaedic surgery OR 4.6	• *0%*

GETTING STARTED

Will your local community and GPs be affected?

- Reducing opioid prescribing at discharge does <u>not:</u>
  - ✓make patients less satisfied with care;
  - ✓result in more visits to the GP for prescriptions worsen analgesia.

- Consumption relates more closely to supply than to pain.

- GPs shouldn't be left with the job of weaning unnecessary SR opioids postoperatively.

Where have I ended up? Hopefully, more responsive to the needs of individual patients.

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Up next

- A conversation with Dr Jennifer Stevens and Dr Tejas Kanhere
- Q&A with Dr Chris Hayes, Dr Jennifer Stevens and Dr Tejas Kanhere

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bettercareeverywhere.gov.au